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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/070,908	05/04/1998	MITSUNORI SAKAMA	0756-1799	4942

31780 7590 11/27/2002

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EXAMINER

PADGETT, MARIANNE L

ART UNIT	PAPER NUMBER
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1762

DATE MAILED: 11/27/2002

37

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09P70908

Applicant(s)

Sakama

Examiner

M. L. Padgett

Group Art Unit

1702

— The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address —

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

☒ Responsive to communication(s) filed on 8/19/02

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- ☒ Claim(s) 23 - 29, 31-50, 58-129 is/are pending in the application.
- Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☒ Claim(s) 23-29, 31-50 + 58-129 is/are rejected.
- ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).
- ☐ All ☐ Some\* ☐ None of the:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

## Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_
- ☐ Interview Summary, PTO-413
- ☐ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Other \_\_\_\_\_

Office Action Summary

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1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 23-29, 45-50, 58-104, 106-110 and 113-129 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-63, or claims 1-5, 12-21 and 27-30 of U.S. Patent No. 6,281,147, or Patent No. 6,015,762, respectively in view of Gupta et al. (PN 6,289,834), and optionally considering Kozuka, as applied in paper # 33.

3. Claims 23-29, 45-50, 58-59, 61-65, 67-82, 84-87, 89-104, 106-110 and 113-129 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kozuka, in view of Gupta et al (6,289,843 B1) and (5,456,796), as applied in paper # 30.

4. Claims 60, 66, 83 and 88 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kozuka, in view of Gupta et al. (843 B1 & 796) alone as applied above, or

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further in view of Mei et al., or Kaschmitter et al., or Yamazaki et al, as also applied in paper #30.

5. Claims 31-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kozuka, in view of Gupta et al (796) & (843 B1), as applied to claims 23-29, 45-50 and 58-129 above, and further in view of Mei et al., or Kaschmitter et al., or Yamazaki et al a applied in paper # 30.

6. Applicant's arguments filed 8/19/02 have been fully considered but they are not persuasive.

On page 4, 2<sup>nd</sup> full paragraph, applicants state that the "cited prior art fails to disclose or suggest a discharge gas is not mixed with a reactive gas". This is incorrect, as previously pointed out by the examiner in the above rejections, either Gupta et al references has been shown to teach this limitation. In Gupta et al (796), see col. 5, lines 31-50 and col. 6, lines 61-68; and in (843 B1) col. 5, lines 5-15. While indeed the Gupta et al references only teach that the dilutant/inert/plasma gas may be stopped, and also teach that the reactant gas may or may not be mixed therewith, this shows equivalent usage of the two options, thus strengthens the obviousness arguments. Applicant's overlooking of the teachings in the secondary reference is not convincing, nor is their attempt to essentially say that use of "preferably" necessitates use of a limitation, as a preference does not eliminate use of less preferred options, <sup>especially</sup> espiously in light of equivalence teachings.

While applicant's argue the significance of their procedure producing a "radio frequency discharge becomes stable" due to their maintained flow rate (p. 2 response), as previously discussed Kozuka is also teaching a stable plasma, but discuss its parameters in term of constant

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pressure. As previously noted, these are related features and one of ordinary skill when knowing that the pressure is to be maintain but gases input changed, would have expected that this would involve control of flow rates, especially given the secondary reference Gupta et al (843 B1) teachings previously discussed that "the total flow rate at which gases introduced while RF power is being brought to full power is substantially equal to the total flow rate at which gases are introduced ... to deposit" (col. 2, lines 54-58, etc.), which while not specifically mentioning the transition between the two gas inputs, would suggest to the compentant workmen that one not create discontinuities in the flow rate at the gas change over (transition), which is consistent with maintaining the pressure throughout the process in Kozuka. The Gupta et al teachings are for bringing the plasma to full power before reactive gas input, which also suggest stable plasma via alternate word choice, so the aims in plasma control of plasma stability are analogous for the Kozaka and Gupta et al references, and for the present claims. The prior art combined for the rejection discuss intimately related parameters of flow and pressure for achieving like ends. While identical wording as used by applicant's claims is not found in the patents, no significantly different means of achieving the stability, or maintance of pressure/gas flow is apparent to the examiner.

It appears that applicants arguments against the judicial double patenting is essentially the same as that against the precedes art rejection, hence similarly unconvincing.

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication should be directed to M L. Padgett at telephone number 703-308-2336 on M-F from about 8 am- 4:30 pm; FAX#(703) 872-9311 (after final) or 305-6078 (unofficial).

M. L. Padgett/mn  
11/25/2002  
11/27/2002



MARIANNE PADGETT  
PRIMARY EXAMINER